# Medical Expense and Performance Reporting System (MEPRS)

#### **An Overview**

TMA MEPRS Program Office









## Agenda

- Introduction
- Account Structure
- Financial Data
- Personnel Data
- Workload Data





#### Introduction

#### Purpose:

Provide uniform reporting by Functional Cost Code (FCC) of expense, manpower, & workload for DoD Medical Treatment Facilities (MTF) providing management a basic framework for cost and work center accounting.

**MEPRS** refers to the expense, personnel, and workload data.

**Expense Assignment System (EAS)** is the hardware and software in which the information resides.





#### Introduction

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Army: STANFINS/GFEBS

(Standard Army Finance System/General Fund Enterprise System)

Navy: STARS-FL

(Standard Accounting and Reporting Systeems Level

Air Force: GAF-R

(General Accounting Finance System Rehost)

**Personnel** 

**§DMHRSi** 

(Defense Medical Human Resource System - internet)

**Workload** 

§CHCS/WAM

(Composite Health Care System / Workload Assignment Module)

MEPRS Data: DoD-Standardized, Aggregated by FCC



specific)



## **Account Structure**

**Functional Cost Codes (FCCs)** are 4-character MTF-specific codes representing work centers or reporting facilities; used to track costs, workload and FTEs. The first 3 letters are DoD-standard.

The fourth letter is MTF-unique and used to identify specific types of costs and workload:

```
B = AMBULATORY CARE (DoD standard)
BH = PRIMARY MEDICAL CARE (DoD standard)
BHA = OUTPT PRIMARY CARE CLINICS (DoD standard)
BHAA = Outpt Primary Care Clinic - Parent Facility (MTF specific)
BHAM = Outpt Primary Care Clinic - TMC-1 (MTF
```

BHAW = Outpt Primary Care Clinic - TMC-5 (MTF





#### **Expense Purification**

Cost pools are identified with an "X" in the 3rd FCC position. They are used when time and expense cannot be specifically assigned because two or more work centers share space, personnel or supplies. For example, *mixed wards*.

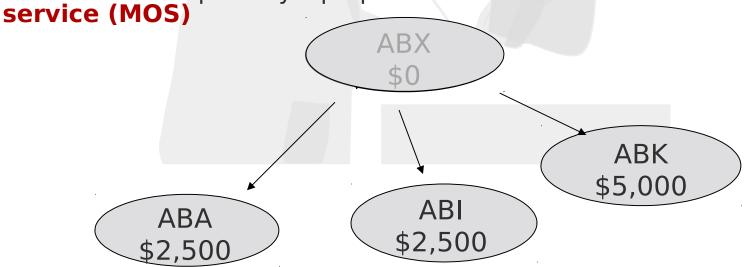
**Expenses and FTEs** in cost pools are reassigned (**purified**) on the basis of workload.





#### **Expense Purification**

- Ward 3E has several nurses assigned to the cost pool (nursing salary dollars) shared by three specialties -- Cost Pool ABX (\$10,000)
  - ABA General Surgery (2,500 MOS)
  - ABI Plastic Surgery (2,500 MOS)
  - ABK Urology (5,000 MOS)
- Nursing Salary dollars accumulated in ABX (\$10,000) are purified based on each specialty's proportional Ward 3E minutes of







#### **Expense Allocation**

#### **Intermediate (Stepdown) Accounts**

- D Ancillary Services
- E Support Services

Ancillary and Support expenses are allocated (stepped-down) across final accounts.

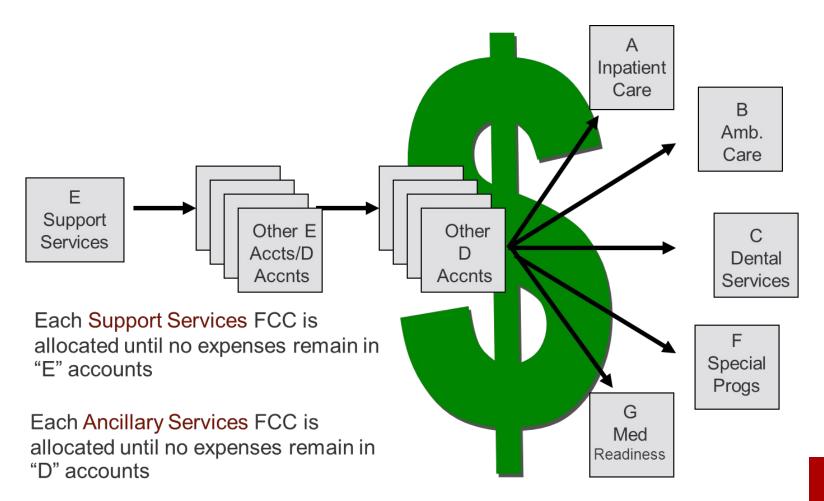
#### **Final Operating Accounts**

- A Inpatient Care
- B Ambulatory Care
- C Dental Care
- F Special Programs
- G Medical Readiness





**Expense Allocation** 







## **Financial**

DoD	Air Force	Army	Navy
SEEC - Standard	EEIC - Element of		
Expense Element	Expense	EOR - Element of	EE - Expense
Code	Investment Code	Resource	Element
		AMSCO - Army	
PEC - Program	PEC - Program	Management	SAG - Subactivity
Element Code	Element Code	Structure Code	Group

Service specific codes that categorize expenses into Pay Data (Military & Civilian), Contracts, Supplies, Equipment, Base Operations, etc. are mapped to DoD standard codes in EAS.





#### Personnel

#### **Full Time Equivalent (FTE)**

Amount of labor available to the MTF work center if a person works fulltime for 1 month.

#### **Assigned FTEs**

Time reported by personnel assigned to specific positions/work centers on MTF manning documents.

1 FTE = the number of days in a month

#### **Available FTEs**

Time reported by any personnel in a given clinic for a given month. Includes those who are Assigned, attached, borrowed, contracted, volunteers, etc.

1 FTE = 168 man-hours in 1 month (1FTE is calculated as an average of 21 work days per month x 8 hours per day)

#### **Non-Available FTEs**

Time reported by Assigned personnel in their Assigned we center that is unrelated to the healthcare mission such as





## **Personnel**

Total FTEs (Assigned /

Available)

Personnel Category

Skill Type

Skill Type Suffix





### Personnel

Total FTEs

Officer Enlisted Civilian Contract Other

#### Clinicians

Direct Care Professionals

Registered Nurses Direct Care Paraprofessionals

Admin/ Clerical/Log

Physician
Dentist
Medical Resident
Medical Fellow
Medical Intern
Dental Intern
Dental Fellow
Dental Resident
Veterinarian

Physician Assistant Nurse Practitioner Nurse Midwife Nurse Anesthetist Community Health Occupat. Health Nurse Clinical Nurse Specialist Other DC Professionals

Reg<mark>istered</mark> Nurse Other

LPN or LVN Nursing Assistant Other Logistics Clerical Administrator Other





## Workload

The main function of workload data in EAS is to provide a basis to allocate expenses among work centers; therefore, workload is collected in relationship to costing. Historically, MEPRS workload in EAS with its limited focus has been used for analysis but today the MHS Data Mart (M2) is the official specific of workload data because it serves an analysis mission.

#### **Inpatient Services**

Admissions
Dispositions
Occupied Bed Days
Bassinet Days

**Ambulatory Services**Visits

#### **Ancillary Services (D)**

Procedures (Raw and Weighted)
Minutes of Service
(Surgical)
Hours of Service (ICU)

#### **Special Programs (F)**

Immunizations Visits





## **Policy & Business Rules**

- DoD 6010.13M (dated April 7, 2008)
  - Provides Tri-Service MEPRS program policy and guidance to all MEPRS reporting MTFs/DTFs.
  - Download from/access Online: www.meprs.info.

<b>Chapter 1:</b>	General Information	
<b>Chapter 2:</b>	Chart of Functional Cost Codes	
Chapter 3:	Guidelines And Reporting Requirements	
Chapter 4:	Issue Process	
Appendices	Acronyms, Definitions, Guidelines for reporting FTEs	

# Medical Expense and Performance Reporting System (MEPRS)

## Data Quality Management Control Review List









## Agenda

- Education
  - •5M2U (MADI)
  - QUEST
- MEWACS
  - Data Load Status
  - Outliers
  - WWR/EAS IV
  - Allocation
- •CCR





#### **MEPRS Education**

#### **Question A.7.c)**

## "Have the members of the DQ Assurance Team been trained in their area of responsibility?"

Note: A.7.c is to be used locally to ensure that team members have training in their functions and responsibilities. (E.g., Analysis: WISDOM; Medical Expense and Performance Reporting System (MEPRS): **MADI, QUEST**; Uniform Business Office (UBO): webinars; Patient Administration (PAD): Service PAD Course.)





## WWW.MEPRS.INFO/5M2U



**MEPRS** Home

>ADMIN

>MyMEPRS

5M2U

>> Members

>> Events Calendar

>> Learning Resources

>MEWACS

MEPRS Management
Improvement Group (MMIG)

Request EAS IV Repository
Access

>Functional User Guides

Ouick Links

>2008 MEPRS Conference

2007 MEPRS Conference

>2005 MEPRS Conference

EAS IV Functional Data Dictionary

Six Sigma MEPRS ManagementMetrics(S2M3)

**MEPRS** Newsletter

**MEPRS Minute** 

MEPRS Manual (DoD 6010.13-M) (PDF)

EAS IV Program Office Updates

MEPRS Questions? Contact

#### Welcome to MyMEPRS

The TMA MEPRS Program Office is pleased to introduce MyMEPRS, a portal community feature allowing users to share experiences, knowledge, and resources with their peers. Additional tools and enhancements allow interaction with the site itself.

MyMEPRS members can take advantage of such exciting new benefits as:

#### 5 Minute MEPRS University



Learn the fundamentals of Business Objects, MEWACS, and the EAS IV Repository with this series of web-based tutorials. Demonstrations combined with audio offer query building guidance and tips for interpreting MEPRS data.

#### Forums



Network and share ideas with other members of the MEPRS community. Public profiles allow you to list your MEPRS experience and locate peers. Start a thread regarding a specific MEPRS topic, or join a discussion already in progress. Use the forum's private messaging capabilities for one-on-one communication. Personalize your messages with your own signature icon.

#### Calendars

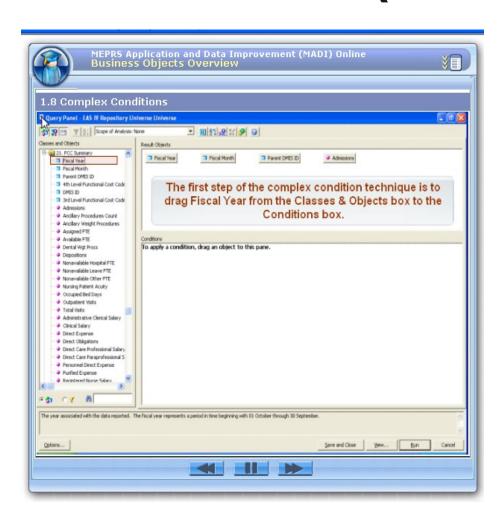


Find out about MEPRS training, conferences, and more on the interactive calendar. Use the calendar to post events of interest to the MEPRS community or simply track your own private appointments.





## (5M2U)



- A web-based distance learning vehicle that offers animated tutorials that illustrate MEPRS concepts and processes.
- •Each tutorial contains targeted learning content and is approximately five minutes in length.
- •Consists of the five core modules that make up the MEPRS Application and Data Improvement (MADI) course as well as modules to guide the repository user through common data



EAS IV Program Office

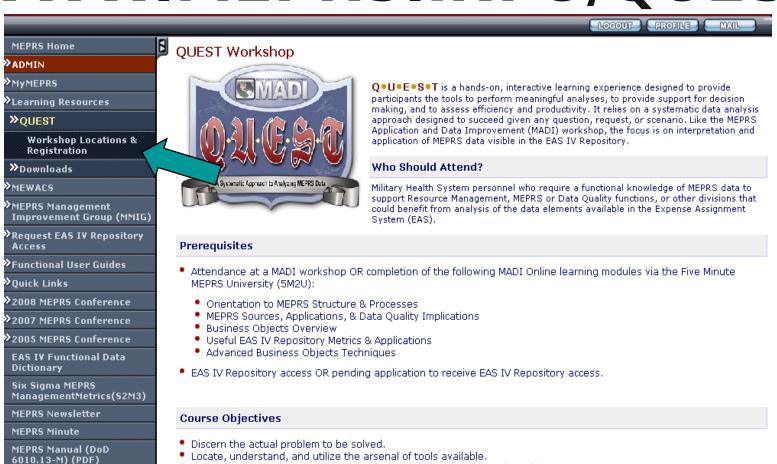
MEPRS Questions? Contact

used.

Updates



## WWW.MEPRS.INFO/QUEST



Build EAS IV repository queries using the appropriate classes and condition statements.

Document analysis results to include any caveats to the data that may influence decisions on how or if the data are

Analyze the data for any known or hidden issues that may impact results.





#### **QUEST - Advanced MEPRS Course**

#### **Summary**

A hands-on, instructor based, interactive learning experience designed to provide participants the tools to perform meaningful analyses, to provide support for decision making, and to assess efficiency and productivity.

Attendees will learn a step-by-step approach to deta analysis targeting data available in the EAS IV repository.

1. Successful completion of a MADI workshop OR currently, completion of the MADI Online learning modules via the Five Minute MEPRS University (5M2U).

2. Experience with Business Objects, MS Excel, and the MEPRS data available in the EAS IV repository. Refer to the portal







## QUEST - Advanced MEPRS Course FY12 QUEST Schedule

Mar 6 - Mar 8, San Antonio, TX
May 8 - May 10, Falls Church, VA
Jun 5 - Jun 7, San Antonio, TX
Jul 31 - Aug 2, San Antonio, TX





## **DQMC Review List**

#### **Question C.1.d.)**

"Were the data load status, outlier or variance, WWR (EAS IV), and allocation tabs in the MEWACS document reviewed and explanations provided in the comments section for flagged data anomalies?"





#### WWW.MEPRS.INFO/MEWACS





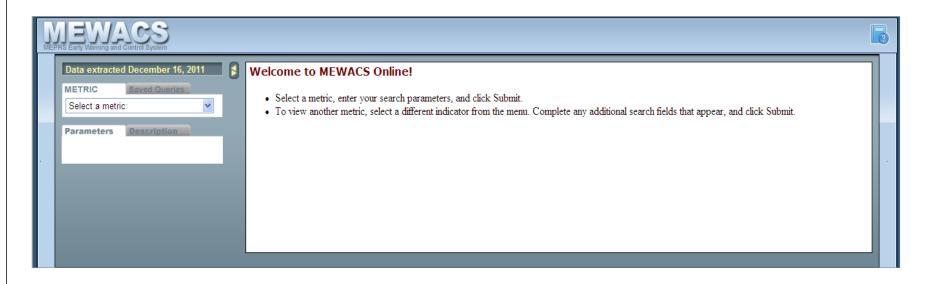


## **DQMC Review List**

Review Item 1. "EAS IV Repository **MEPRS** data load status and compliance with the 45-day reporting suspense or Service Guidance whichever is earlier. If the facility has a pattern (2 or more) of flagged cells on this tab, has it corrected it or developed a plan to correct it? Provide an explanation in the Comments Section."

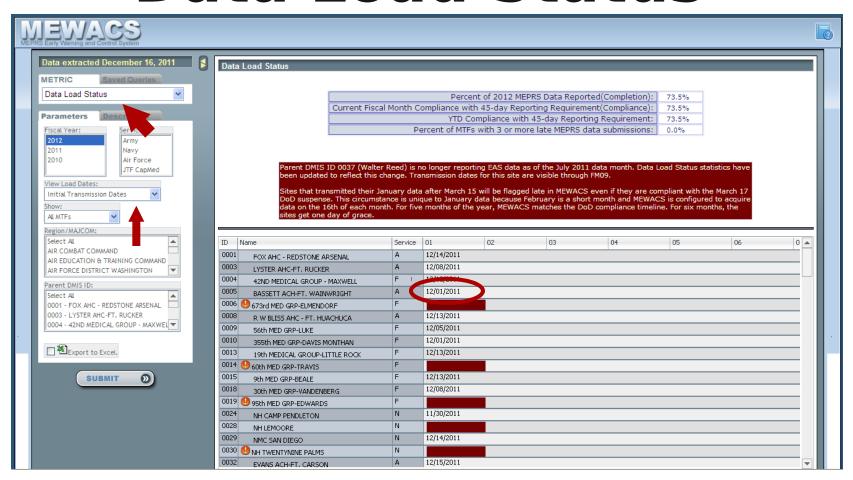






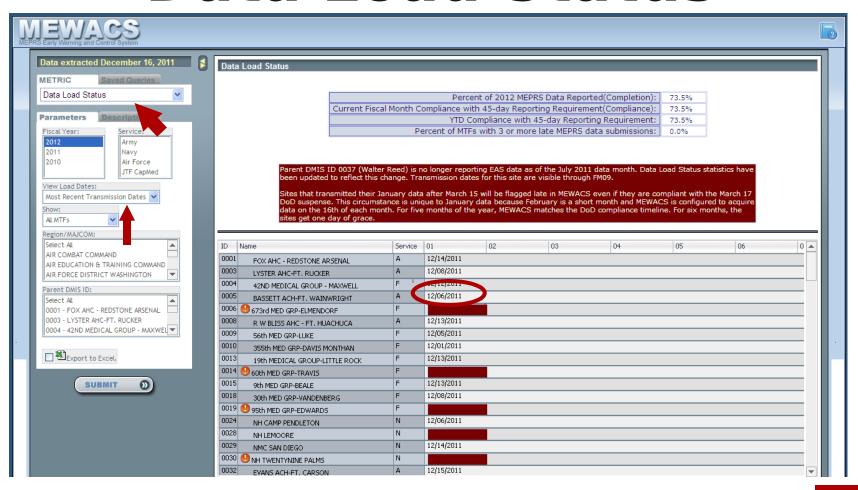






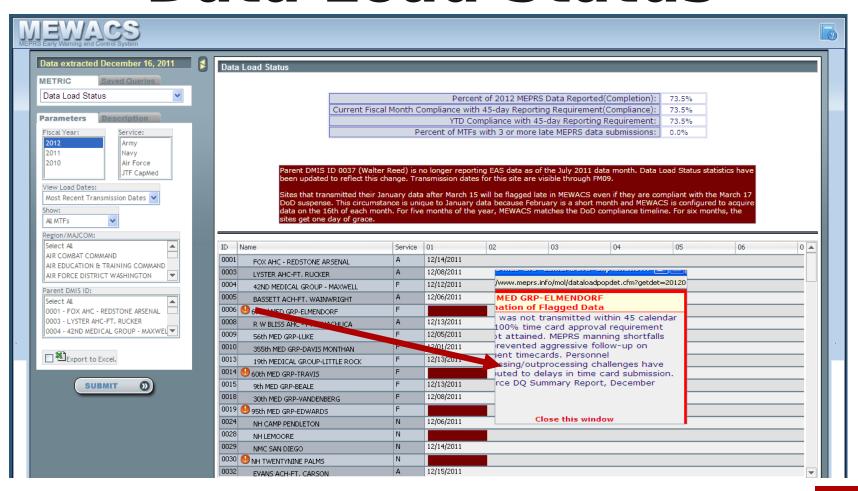














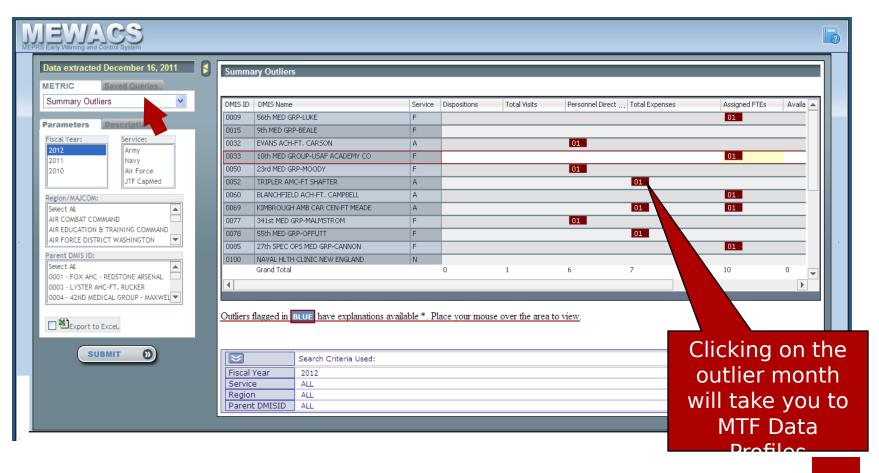


## **DQMC Review List**

Review Item 2. "MTF-specific summary data outliers. If the facility has any Prior Fiscal Year or Current Fiscal Year flagged cells on this tab, provide an explanation in the Comments Section."

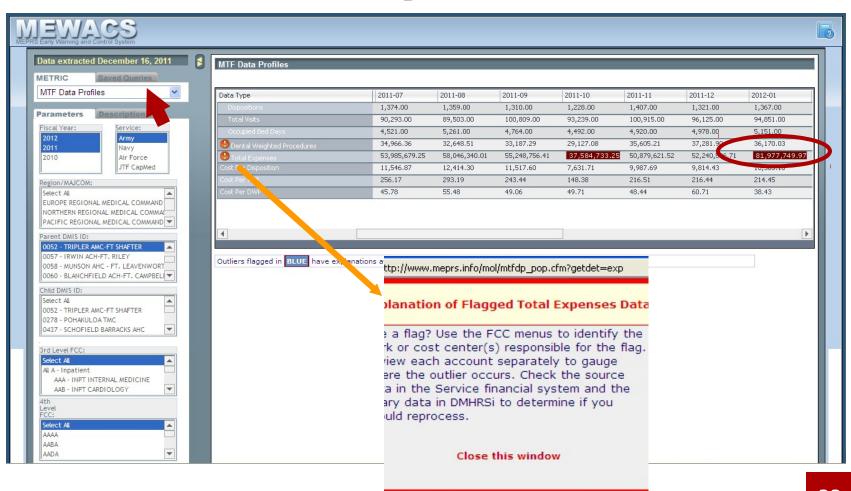






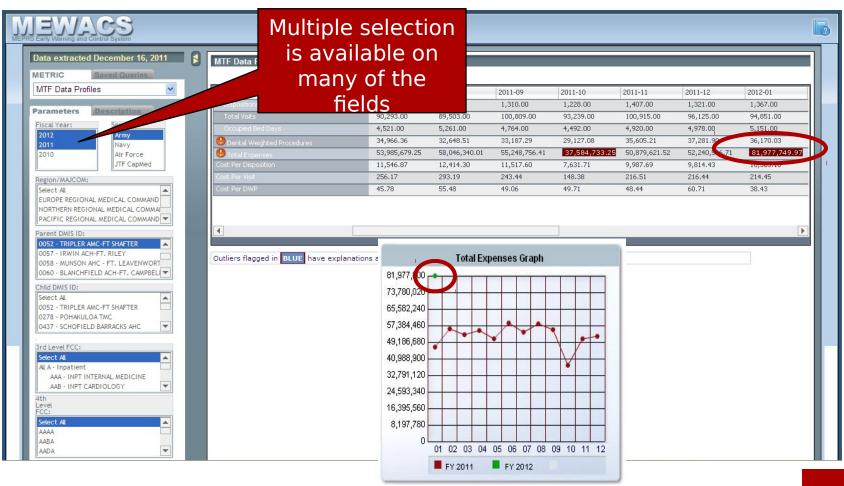






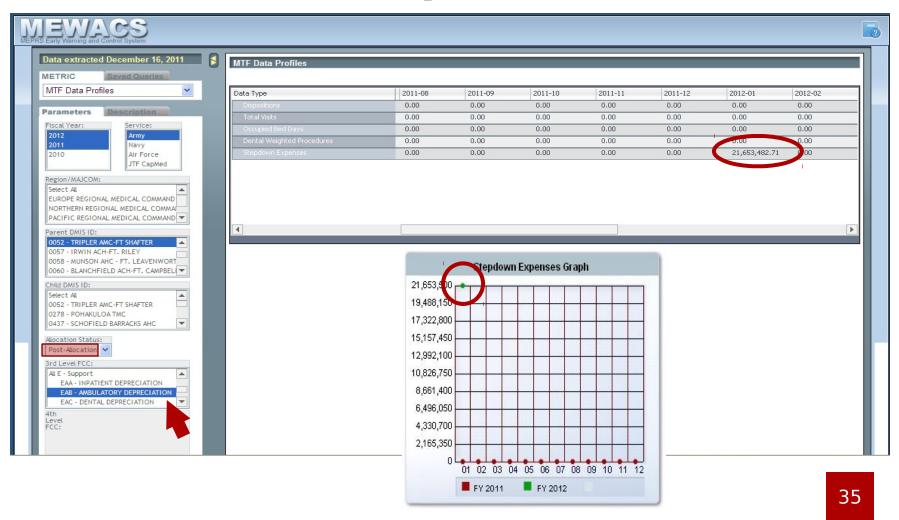
















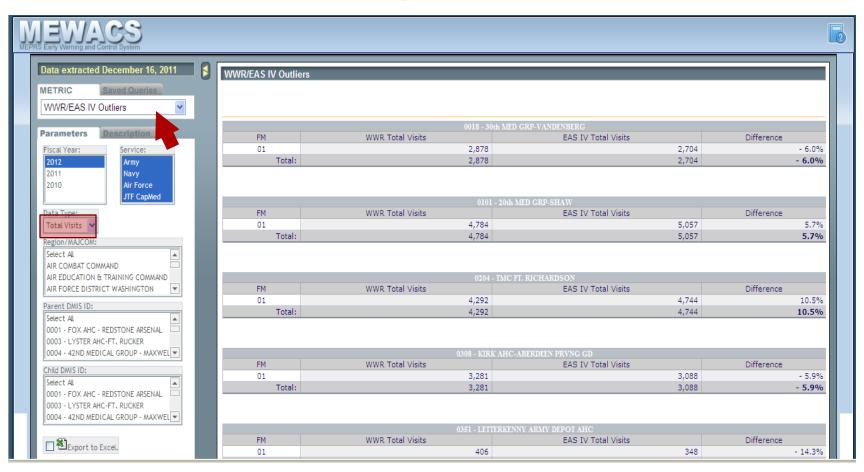
## **DQMC Review List**

Review Item 3. "WWR - EAS IV total ambulatory visit comparison. If the facility has any Prior Fiscal Year or Current Fiscal Year fiscal month data where WWR vs. EAS IV visit counts differ by greater than 5%, provide an explanation in the Comments Section."





## **WWR/EAS IV**







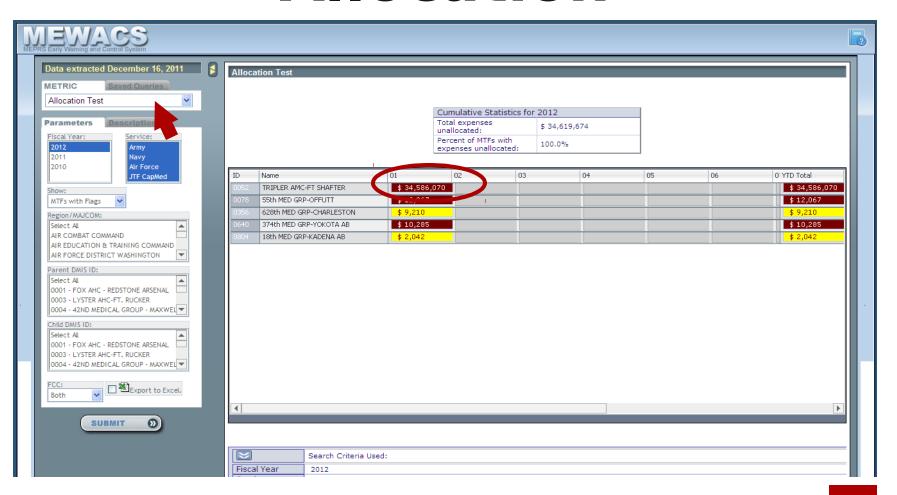
## **DQMC Review List**

Review Item 4. "Ancillary and Support expense allocation tests. If the facility is flagged in the Prior Fiscal Year or **Current Fiscal Year due to incomplete** allocation of ancillary or support expenses, provide an explanation in the Comments Section, including projected date for submitting corrected data."





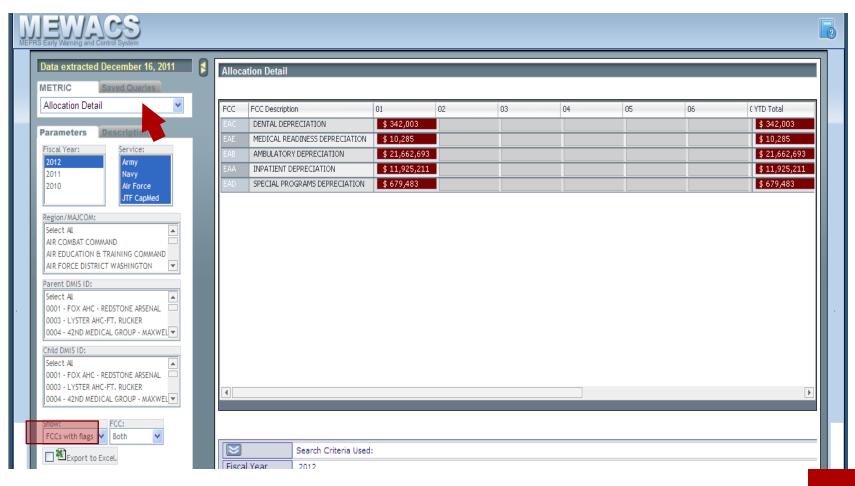
## **Allocation**







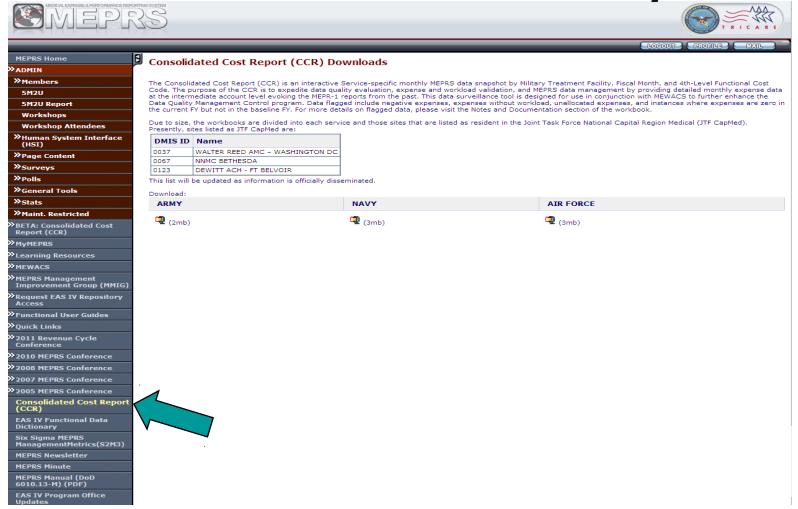
## Allocation







## WWW.MEPRS.INFO/CCR





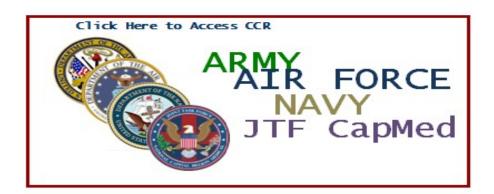


## **CCR**



# FY10 Consolidated Cost Report (CCR)

An interactive Service-specific monthly MEPRS data snapshot by Military Treatment Facilty, Fiscal Month, and 4th-Level Functional Cost Code incorporating automated variance detection to facilitate data quality evaluation, expense and workload validation, and monthly local MEPRS data management.



Executive Summary Data Sources

Notes and Documentation External Resources





## **CCR**

#### FY12 MEPRS Consolidated Cost and Workload Report: Navy

Key:

Front Page

### Executive Summary

#### Note:

This Executive Summary report offers the percent of flagged monthly expense and workload components by MTF. It should be interpreted with caution as it gauges the frequency of potential data anomalies, not the magnitude of the data variance detailed by CCR. It is useful for distinguishing MTFs and Fiscal Months within MTFs that exhibit a significant amount of data variability. Empty cells represent insufficient data for metric.

#### Version:

December 2011

Over 15% of CCR cost and workload flagged

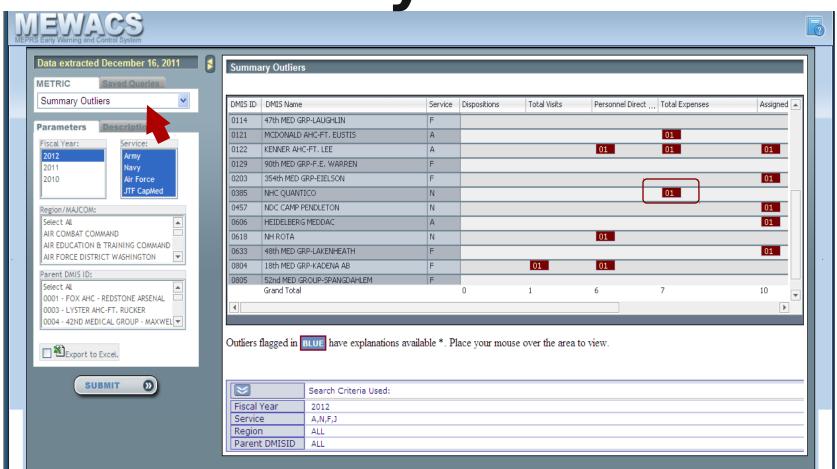
Over 25% of CCR cost and workload flagged

						F	Y 2012 Fi	scal Mor	nths				
Facility	Clinical Service	01	02	03	04	05	06	07	08	09	10	11	12
0385 - NHC QUANTICO	MEPRS B - Outpatient	22.6%											
	MEPRS C - Dental	13.3%											
	MEPRS D - Ancillary	20.0%											
	MEPRS E - Support	6.3%											
	MEPRS F - Special Progs	10.0%											
	MEPRS G - Readiness	0.0%											
0457 - NDC CAMP PENDLETON	MEPRS C - Dental	4.8%											
	MEPRS D - Ancillary	0.0%											
	MEPRS E - Support	3.0%											
	MEPRS F - Special Progs	0.0%											
	MEPRS G - Readiness												
0492 - NDC CAMP LEJEUNE	MEPRS C - Dental	2.7%											
	MEPRS D - Ancillary	1.3%											
	MEPRS E - Support	1.1%											
	MEPRS F - Special Progs												
	MEPRS G - Readiness	0.0%											
0615 - NH GUANTANAMO BAY	No Data Reported												
0617 - NH NAPLES	MEPRS A - Inpatient	7.5%											
	MEPRS B - Outpatient	9.3%											





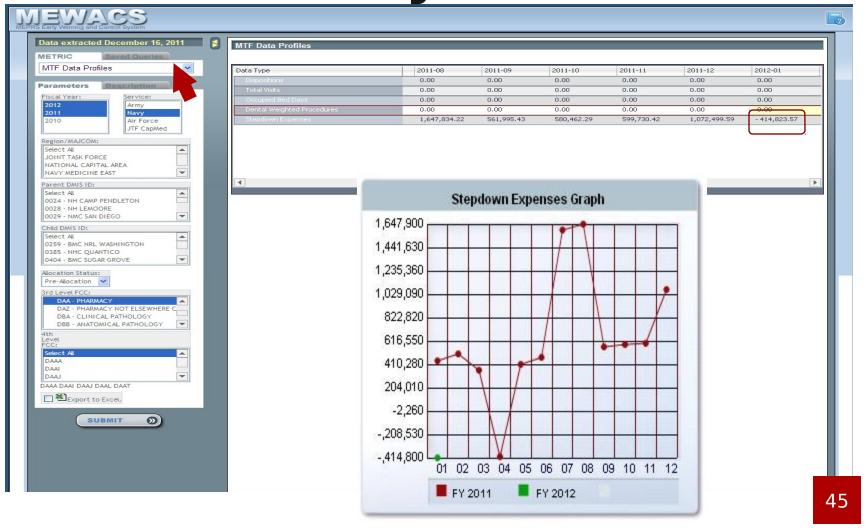
## **Summary Outliers**







# **Summary Outliers**







## **CCR**

FY12	MEPRS Consolidated Cost and Worl	kload F	Report	: Navy							
	o to FY12 Data Front Page										
	Select Parent Facility Below		Select	Fiscal Mo	nth Below	Select 1st-Le	evel FCC Code				
	0385 - NHC QUANTICO ▼		FM	101 - October	▼	MEPRS D - An	cillary 🔽				
Key: +/- 3	3 Std. Deviations from FY11 baseline monthly average										
			Workload	d							
								EA	EBH	OTHER EB	
4th Level Functional Cost Code		DISP	OBD	тоv	Purified Direct Labor	Purified Direct Non-Labor	Total Indirect Expenses (E & D)	DEPRECIATION	THIRD PARTY COLLECTIONS ADMINISTRATION	COMMAND, MANAGEMENT, AND ADMINISTRATION	9 9
					Expense	Expense	, ,				
								OBD#TOTY	CLAIMS BILLED	AVAILABLE FTE	SQUA
DAAA	PHARMACY	0	0	0	<b>\$</b> 74.138	-\$536,827	\$31,828	\$0	\$0	\$26,234	
DBAA	CLINICAL PATHOLOGY	Ö	Ŏ	Ĭ	\$56,187	-\$211	\$17,882	\$0	\$0	\$14,610	
DCAA	DIAGNOSTIC RADIOLOGY	0	0	0	\$40,455	\$14,563	\$82,932	\$0	\$0	\$8,619	
DEAA	CENTRAL STERILE	0	0	0	\$2,998	\$0	\$1,785	\$0	\$0	\$1,475	
DAAT	PHARMACY	0	0	0	\$9,128	\$0	\$2,302	\$0	\$0	\$1,474	
DBAT	CLINICAL PATHOLOGY WNY 32563	0	0	0	\$9,470	\$0	\$2,483	\$0	\$0	\$1,313	!
DAAI	PHARMACY-TBS	0	0	0	\$180	\$17	\$506	\$0	\$0	\$135	
DBAI	CLINICAL PATHOLOGY-TBS	0	0	0	\$757	\$0	\$413	\$0	\$0	\$345	
DCAI	DIAGNOSTIC RADIOLOGY-TBS	0	0	0	\$5,580	\$0	\$2,391	\$0	\$0	\$1,957	
DAAL	PHARMACY SG 32747	0	0	0	\$2,407	-\$548	\$1,918	\$0	\$0	\$1,356	
DBAL	PATHOLOGY LAB SG 32747	0	0	0	\$939	\$0	\$1,305	\$0	\$0	\$659	
DAAJ	PHARMACY-OCS	0	0	0	\$60	\$0	\$71	\$0	\$0	\$42	
DBAJ	LABORATORY-OCS	0	0	0	\$9,694	\$0	\$1,847	\$0	\$0	\$1,567	
DCAJ	DIAGNOSTIC RADIOLOGY - OCS	0	0	0	\$4,802	\$0	\$2,202	\$0	\$0	\$1,800	
DCAT	DIAGNOSTIC RADIOLOGY WNY 32563	0	0	0	\$5,515	\$0	\$2,446	\$0	\$0	\$765	!
DEAT	CENTRAL STERILE SUPPLY WNY 0703	l n	l n	l n	\$3,949	1 \$∩	\$663	<b>\$</b> ∩	l \$∩	\$604	l





## **CCR**

FYIZ	MEPRS Consolidated Cost and Wor						<u> </u>								
G	o to FY12 Data Front Page														
Go t	o FY11 Baseline														
	Select Parent Facility Below		SelectFi	scal Month	Below	Select 1s	t-Level FC	C Code							
	0385 - NHC QUANTICO		EMO1	- October	$\overline{lack}$	MEPRS B	- Outpatient	<b>-</b>							
			111101	- October	•	1 12 112 2									
Key: +/- 3	Std. Deviations from FY11 baseline monthly average														
		Left to Ric	ght Stepdo	wn Sequence	e Order)										
		EK	EL	DE	DA	DB	DC	DD	DF	DG					
4th Level Functional Cost Code	4th Level Functional Cost Code Description	AMBULATORY CARE PATIENT ADMIN.	MANAGED CARE	CENT STERILE SUPPLY/MATERIEL SERV	PHARMACY SERVICE	PATHOLOGY	RADIOLOGY	SPECIAL PROCEDURE SERVICES	SURGICAL SERVICES	SAME DAY SERVICES					
Cost Code		ition Performance Factors													
		тоту	AVAILABLE FTE	HOURS OF SERVICE	VEIGHTED PROCEDURES	VEIGHTED PROCEDURES	WEIGHTED PROCEDURES	VEIGHTED PROCEDURES	MINUTES OF SERVICE	MINUTES OF SERVICE	PF				
D	INTERNAL MEDICINE LODGOM TAYOUNIO	4510	4355		*0.467	*077	*204	40	40	40					
BAAA BAPA	INTERNAL MEDICINE / SPECIALTY CLINIC IDERMATOLOGY CLINIC	\$512 \$761	\$755 \$174	\$0 \$0	-\$3,167 -\$6,289	\$277 \$58	\$384 \$0	\$0 \$0	\$0 \$0	\$0 \$0					
BFDA	MENTAL HEALTH CLINIC	\$4,673	\$1,601	\$0 \$0	-\$6,269 -\$11,338	\$2,156	\$0 \$0	\$0 \$0	\$0 \$0	\$0					
BHCA	IOPTOMETRY CLINIC	\$3,586	\$936	\$0 \$0	-\$3,959	\$55	\$261	\$0 \$0	\$0 \$0	\$0					
BHGA	OCCUPATIONAL HEALTH CLINIC	\$2,119	\$1,013	\$0 \$0	-\$3,353 -\$1,102	\$2,584	\$769	\$0 \$0	\$0 \$0	\$0					
BJAA	FLIGHT MEDICINE CLINIC	\$93	\$651	\$0	-\$1,515	\$583	\$2,150	\$0	\$0	\$0					
BLAA	PHYSICAL THERAPY CLINIC (MAINSIDE)	\$3,967	\$1,067	\$0	-\$138	\$0	\$3,281	\$0	\$0	\$0					
	FAMILY MHP - TEAM 1	\$17,683	\$7,723	\$127	-\$85,932	\$22,477	\$45,551	\$0	\$0	\$0					
BHA2	PDHRA (DEPLOYMENT HEALTH CLINIC)	\$13,220	\$3.414	\$0	-\$9,787	\$6,282	\$15.293	\$0	\$0	\$0					
BHAJ	PRIMARY CARE CLINIC-OCS	\$6.164	\$9.317	\$0	-\$1,605	\$15,409	\$8,601	\$0	\$0	\$0					
BHFA	COMMUNITY HEALTH CLINIC	\$171	\$685	\$0	\$0	\$0	\$0	\$0	\$0	\$0					
BHAA	PRIMARY CARE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0					
BGZC	FAMILY MHP - TEAM 2	\$0	\$0	\$0	\$33	\$0	\$0	\$0	\$0	\$0					
BGZD	FAMILY MHP - TEAM 3	\$16,076	\$4,024	\$115	-\$90,247	\$14,297	\$43,061	\$0	\$0	\$0					
BHGT	OCCUPATIONAL HEALTH CLINIC WNY 0703	-\$80	\$150	\$0	\$67	\$766	\$862	\$0	\$0	\$0					
BHAT	PRIMARY CARE CLINICS WNY 32563	-\$779	\$268	\$210	\$2,172	\$5,790	\$1,998	\$0	\$0	\$0					
BHAI	PRIMARY CARE CLINIC-TBS	\$6,536	\$5,661	\$0	-\$6,202	\$5,888	\$4,963	\$0	\$0	\$0					
BHAL	PRIMARY CARE CLINICS SG 32747	\$0	\$80	\$0	\$3,593	\$2,263	\$0	\$0	\$0	\$0					
BEDI	TBS CHIROPRACTIC CLINIC	\$1,040	\$378	\$0	\$0	\$0	\$251	\$0	\$0	\$0					
BLAJ	PHYSCIAL THERAPY CLINIC-OCS	\$5,900	\$1,506	\$0	-\$40	\$0	\$2,240	\$0	\$0	\$0					
BHCT	OPTOMETRY CLINIC WNY 32563	-\$73	\$81	\$0	\$524	\$0	\$0	\$0	\$0	\$0					
BLAI	PHYSICAL THERAPY CLINIC-TBS	\$1,607	\$321	\$0	\$7	\$27	\$627	\$0	\$0	\$0					
BARJ	SPORTS MED/ORTHOPEDIC CLINIC OCS	\$8	\$561	\$0	\$0	\$0	\$0	\$0	\$0	\$0					
BDZA	PEDIATRIC MHP TEAM 1	\$9,401	\$2,932	\$121	-\$28,387	\$1,857	\$13,833	\$0	\$0	\$0					
BEDJ	OCS CHIROPRACTIC CLINIC	\$2,554	\$457	\$0	\$0	\$0	\$2,511	\$0 *°	\$0	\$0					
<b>4</b> IIII											▶				
Ready									□ III 100% (=						





# **Anomaly Criteria**

CCR employs a multi-step criteria for flagging workload and cost components for further inspection:

- 1. All negative expense values are flagged.
- 2. Ancillary and Support expenses remaining after step down closeout are flagged.
- 3. \$0 expense values in a fiscal month by 4th-Level FCC are flagged if average monthly baseline comparison expenses for same 4th-Level FCC exist.
- 4. Workload values are flagged if no workload is reported in a fiscal month but expenses are reported for same 4th-Level FCC.





# **Anomaly Criteria**

- 5. MTF-specific 4th-Level FCCs accounting for 80% of total MTF expenses are selected for further analysis. This reduces the number of FCCs evaluated to generally the 20% of 4th-level FCCs that account for 80% of MTF expenses (Pareto Principle or 80-20 Rule). Current fiscal year expense elements deviating by more than 3 Standard Deviations from the average of the previous fiscal year are flagged.
- 6. Data items where year over year variability can be directly traced to workload changes are not flagged.

# Medical Expense and Performance Reporting System (MEPRS)

# Six Sigma MEPRS Management Metrics (S2M3)









## Agenda

- Origin and Goals
- Six Sigma in Healthcare
- S2M3





# **Origin and Goals**

## Six Sigma

- Six Sigma is a statistics based business improvement process that continually strives for perfection.
- It employs a disciplined methodology created from the manufacturing industry for eliminating the wastes of defects or variance to lower costs and improve customer satisfaction.

## Six Sigma Methodology for Improving Existing Processes DMAIC

- **D**efine Opportunities
- Measure Performance
- Analyze Opportunity
- Improve Performance
- Control Performance





# Six Sigma in Healthcare

- Using Lean Six Sigma, Morton Plant Hospital in Clearwater, FL, improved patient satisfaction over 50%, reduced emergency department length of service by 21%, and recovered over \$4 million in cost of quality (aka rework).
- Kaiser Permanente Colorado used Lean Six Sigma to evaluate and improve Medicaid enrollment processes. A three-month project resulted in a 45 percent gain in Medicaid membership while increasing Medicaid revenue by more than \$1 million annually.
- The Nebraska Medical Center used Six Sigma to improve the completeness and availability of physician orders for patients; the project occurred within a Six Sigma program that has returned about \$7.5 million in savings.





#### Six Sigma MEPRS Management Metrics (S2M3)



FY10 Update All data obtained from the EAS IV Repository and M2 on April 4, 2011



#### Click on a peer group below to view a specific metric:

Rx Disper Costs	_
Medical Ce	enters

Large Hospitals

Small Hospitals Large Clinics

Small Clinics

Small Hosp OCONUS

Large Hosp OCONUS Clinics OCONUS

#### Available FTE's per **Daily Occupied Bed**

Medical Centers

Large Hospitals Small Hospitals

Large Hosp OCONUS

Small Hosp OCONUS

#### Ratio of Support Personnel to **Provider FTEs**

Medical Centers Large Hospitals Small Hospitals

Large Clinics Small Clinics

Large Hosp OCONUS Small Hosp OCONUS

Clinics OCONUS

#### Rx Workload per **Rx FTE**

Medical Centers Large Hospitals Small Hospitals

Large Clinics Small Clinics

Large Hosp OCONUS

Small Hosp OCONUS Clinics OCONUS

#### Lab Workload per **Lab FTE**

Medical Centers Large Hospitals

Small Hospitals Large Clinics

Small Clinics Large Hosp OCONUS

Small Hosp OCONUS Clinics OCONUS

#### Rad Workload per Rad FTE

Medical Centers Large Hospitals

Small Hospitals

Large Clinics Small Clinics

Large Hosp OCONUS Small Hosp OCONUS

Clinics OCONUS

#### Inpatient Costs per RWP

Medical Centers Large Hospitals

Small Hospitals

Large Hosp OCONUS

Small Hosp OCONUS

#### **Ambulatory Costs** per APG

Medical Centers

Large Hospitals

Small Hospitals Large Clinics

Small Clinics

Large Hosp OCONUS Small Hosp OCONUS

Clinics OCONUS

#### **Executive Summary:**

Medical Centers Large Hospitals Large Hospitals OCONUS Small Hospitals Small Hospitals OCONUS

Large Clinics Small Clinics Clinics OCONUS

#### Notes:

Six Sigma Description Definition of Metrics Data Sources Peer Group Definitions

#### External MEPRS Resources:

MEPRS Web Portal MEWACS MEPRS Manual DoD 6010.13-M Human System Interface (HSI)

#### MTF-Peer Group Lookup:

Air Force **Amy** Navy

If you have guestions on the data contained, please contact: Deirdre Baker SRA International

210-832-5216 Deirdre Baker@SRA.COM





### **User Notes**

#### **Definition of Metrics**

The metrics contained in this package offer a snap shot of the Direct Care operation at MTFs, including staffing, financial, and workload metrics. By arraying the data in peer groups, MTFs can see their position relative to similar facilities. Rankings and sorting of facilities are done based on Z-S cores (standard deviations from the peer group mean: [(MTF ratio- peer group mean ratio) / peer group ratio standard deviation]).

**Rx Dispensing Costs**: This metric evaluates the cost of dispensing prescriptions, without ingredient costs. Cost data include pharmacy expenses allocated to ambulatory Functional Cost Codes (FCCs) less pharmaceutical supply costs (ingredient costs). In this metric, Raw pharmacy workload across ambulatory functional cost codes (B\*\*\* and FBN\*) is used as a proxy for individual prescriptions. Non-ingredient costs are defined as all pharamacy expenses (DA\*\*) stepped down to the ambulatory FCCs (B\*\*\* and FBN\*) except those expenses in SEEC 26.25 (Pharm Supplies) and any non-labor expenses in PECs 87701 (Pharmaceuticals in Medical Center - OCONUS) and 87901 (Pharmaceuticals in Medical Center - OCONUS). Dispensing cost per prescription is calculated as *[(Non-ingredient Pharmacy Costs) / Raw Pharmacy Workload]*.





## **Control Panel - Peer Groups**

Six Sigma MEPRS Management and Control Metrics

2010 MTF- Peer Group Look-up by Service

Air Force		
Parent DMS ID	Parent DMIS ID Name	Peer
0004	42ND MEDICAL GROUP-MAXWELL	Large Clinic
0006	3rd MED GRP-ELMENDORF	Large Hospital
0009	56th MED GRP-LUKE	Large Clinic
0010	355th MED GRP-DAVIS MONTHAN	Large Clinic
0013	314th MED GRP-LITTLE ROCK	Small Clinic
0014	60th MED GRP-TRAVIS	Medical Center
0015	9th MED GRP-BEALE	Small Clinic
0018	30th MED GRP-VANDENBERG	Small Clinic
0019	95th MED GRP-EDWARDS	Small Clinic
0033	10th MED GROUP-USAF ACADEMY CO	Large Clinic
0036	436th MED GRP-DOVER	Small Clinic
0042	96th MED GRP-EGLIN	Large Hospital
0043	325th MED GRP-TYNDALL	Small Clinic
0045	6th MED GRP-MACDILL	Large Clinic
0046	45th MED GRP-PATRICK	Small Clinic
0050	23rd MED GRP-MOODY	Small Clinic
0051	78th MED GRP-ROBINS	Large Clinic
0053	366th MED GRP-MOUNTAIN HOME	Small Hospital
0055	375th MED GRP-SCOTT	Large Clinic
0059	22nd MED GRP-MCCONNELL	Small Clinic
0062	2nd MED GRP-BARKSDALE	Large Clinic
0066	79th MED GRP-ANDREWS	Small Hospital
0073	81st MED GRP-KEESLER	Medical Center





### Six Siama MEPRS Management and Control Metrics

FY10 S2M3

#### Standardized Executive Summary by Peer Group\*

DMIS ID	MTF Name	Rx Dispensing Costs	Available FTE per Daily Occupied Bed	Ratio of Support Personnel to Provider FTEs	Rx Workload per Rx FTE	Lab Workload per Lab FTE	Rad Workload per Rad FTE	Inpatient Costs per RWP	Ambulatory Costs per APG	Standard ized Average
Medi	cal Centers									
0089	WOMACK AMC-FT. BRAGG	1.15	0.24	2.93	0.62	1.29	1.61	0.73	1.11	1.21
0052	TRIPLER AMC-FT SHAFTER	0.57	0.96	0.18	1.30	0.01	1.12	0.11	1.17	0.68
0029	NMC SAN DIEGO	0.37	1.71	-0.11	-0.14	1.19	-0.05	1.11	0.38	0.56
0047	EISENHOWER AMC-FT, GORDON	-0.01	1.50	0.64	-0.19	0.00	0.77	0.11	1.19	0.50
0117	59th MED WING-LACKLAND	0.35	-0.05	-0.66	0.67	1.64	0.58	0.60	-0.17	0.37
0109	BROOKE AMC-FT. SAM HOUSTON	0.76	-0.49	0.09	2.45	-0.65	0.07	-0.03	-0.03	0.27
0108	WILLIAM BFAUMONT AMC-FT. BLISS	0.25	-0.27	-0.21	0.32	0.83	-0.27	0.56	0.44	0.21
0125	MADIGAN AMC-FT, LEWIS	-0.93	-0.39	0.75	-0.69	-0.32	1.16	0.66	0.70	0.12
0124	NMC PORTSMOUTH	-0.03	0.56	-0.87	-0.58	0.31	-0.64	0.61	0.99	0.05
0067	NNMC BETHESDA	-0.73	0.48	-0.03	-0.40	0.29	0.40	-2.22	-0.83	-0.38
0095	74th MFD GRP-WRIGHT-PATTERSON	1.20	-1.25	-1.06	-0.31	-1.43	-0.51	0.95	-0.98	-0.42
0073	81st MED GRP-KEESLER	0.33	-1.91	-0.77	-1.30	-1.13	-1.52	-0.72	-0.98	-1.00
0014	60th MED GRP-TRAVIS	-0.62	-0.43	-0.63	-0.71	-1.48	-1.28	-1.59	-1.33	-1.01
0037	WALTER REED AMC-WASHINGTON DC	-2.67	-0.65	-0.26	-1.03	-0.56	-1.43	-0.89	-1.66	-1.14

#### \*Note:

The S2M3 Executive Summary has been standardized to reflect uniform positive/negative Z-score values across all metrics, thus positive Z-scores indicate more desirable values and negative Z-scores are less desirable values. For example, in the Pharmacy Dispensing Cost metric a negative Z-score denotes a dispensing cost that falls below the peer group average. Since in that case a negative Z-score is more desirable than a positive value, the Z-score sign reflected in the S2M3 Executive Summary has been changed to positive. The Z-score signs have been reversed for the following metrics in this Executive Summary:

- Rx Dispensing Costs
- Available FTE per Daily Occupied Day
- Inpatient Costs per RWP
- Ambulatory Costs per APG

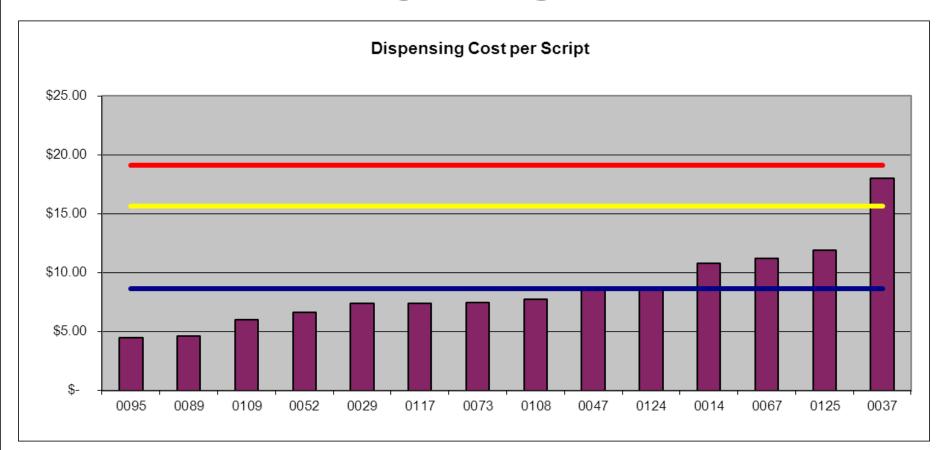




FY10	Cost of Pharmacy Dispensi	_ I Center	s												
									FY10 Cost of Pharmacy Dispensing Summary Statistics						
Parent DMIS ID	Parent DMIS ID Name	RawWork		Rx \$ Less upply Cost	_	Cost per cript	Z Score		Statistic	RawWork	Rx \$ Less Supply Cost	Dispensing Cost per Script			
,						_									
0095	74th MED GRP-WRIGHT-PATTERSON	978,374	\$	4,361,751	\$	4.46	-1.20	Better	Mean:	848,842	\$ 6,869,675	\$ 8.65			
0089	WOMACK AMC-FT. BRACG	1,405,294	\$	6,504,231	\$	4.63	-1.15	<b>│</b>	Median:	790,695	\$ 6,000,932	\$ 7.63			
0109	BROOKE AMC-FT. SAM HOUSTON	752,173	\$	4,506,511	\$	5.99	-0.76		St. Dev.	328,193	\$ 2,767,209	\$ 3.50			
0052	TRIPLER AMC-FT SHAFTER	663,879	\$	4,410,109	\$	6.64	-0.57								
0029	NMC SAN DIEGO	1,449,993	\$	10,686,620	\$	7.37	-0.37			Value nearest	peer group me	ean			
0117	59th MED WING-LACKLAND	812,353	\$	6,025,810	\$	7.42	-0.35			MTFs within 1	Std. Deviation	from the peer group m	nean		
0073	81st MED GRP-KEESLER	798,970	\$	5,976,054		7.48	-0.33			2 Std. Deviation	ons above/belov	w the peer group mean			
0108	WILLIAM BEAUMONT AMC-FT. BLISS	566,436	\$	4,402,647	\$	7.77	-0.25			3 Std. Deviation	ons above/belov	w the peer group mean			
0047	EISENHOWER AMC-FT. GORDON	782,419	\$	6,800,573		8.69	0.01								
0124	NMC PORTSMOUTH	1,229,527	\$	10,758,800	\$	8.75	0.03								
0014	60th MED GRP-TRAVIS	456,532	\$	4,935,243		10.81	0.62								
0067	NNMC BETHESDA	425,470	\$	4,760,011	\$	11.19	0.73								
0125	MADIGAN AMC-FT. LEWIS	997,595	\$	11,887,109	\$	11.92	0.93	↓							
	TALA LEED DEED A MOLALA CHINICECNIDO	ECA 707	4	10.150.000		17.00	2.67	10/0					T i		



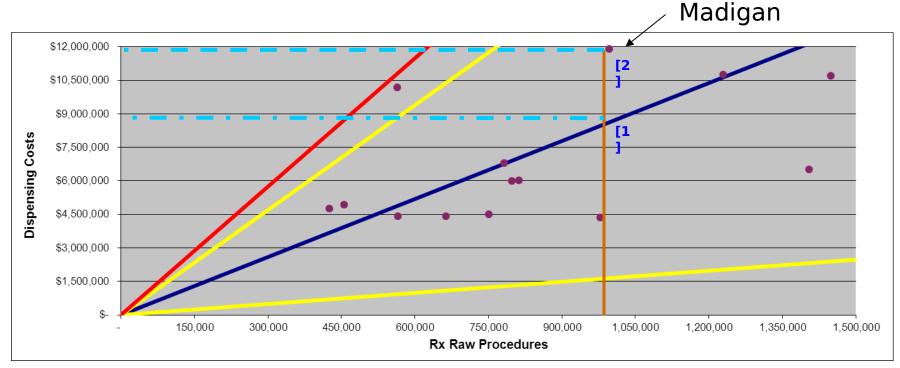












For close to 1,000,000 scripts, we would expect the expenses to be closer to \$9,000,000 [1] but at Madigan for the same number of scripts, the expenses are around \$12,000,000 [2].

Graph 3





## **General Conclusions**

- OCONUS is more expensive than CONUS.
- Facilities with a military mix are more expensive than those with contract or civilian personnel.
- Hospitals or clinics with greater volume of workload fare better.
- Inappropriate cost allocation drives cost results.
- Non-reporting of borrowed labor drives



BROOKE AMC-FT. SAM HOUSTON



## **Analysis**

## **S2M3**

FY10	Rx Weighted Procedures p													
		FY1							FY10 Scripts per FTE Summary Statistics					
Parent DMIS ID	Parent DMIS ID Name	Avg Monthly Avail FTE	Rx Weighted Procedures	Weighted Procs per FIE	Z Score		Statistic	Avg Monthly Avail FTE	Rx Weighted Procedures	Weighted Procs per FIE				
0073	81st MED GRP-KEESLER	82	722,228	8,859.98	-1.30	Worse	Mean:	106	1,723,887	16,325.54				
0037	WALTER REED AMC-WASHINGTON DC	131	1,363,374	10,397.52	-1.03	<b>│</b>	Median:	97	1,466,383	14,879.51				
0014	60th MED GRP-TRAVIS	74	911,715	12,276.92	-0.71		St. Dev.	34	749,672	5,730.36				
0125	MADIGANAMC-FT. LEWIS	124	1,534,051	12,383.78	-0.69									
0124	NMC PORTSMOUTH	186	2,422,065	13,011.48	-0.58			Value nearest	peer group me	an				
0067	NNMC BETHESDA	89	1,253,734	14,030.15	-0.40			MTFs within 1	Std. Deviation	from the peer g	roup mean			
0095	74th MED GRP-WRIGHT-PATTERSON	67	967,484	14,539.52	-0.31			2 Std. Deviation	ons above/belov	v the peer group	mean			
0047	EISENHOWER AMC-FT. GORDON	91	1,389,896	15,219.50	-0.19			3 Std. Deviation	ons above/belov	v the peer group	mean			
0029	NMC SAN DIEGO	159	2,461,327	15,522,43	-0.14									
0108	WILLIAM BEAUMONT AMC-FT. BLISS	77	1,398,715	18,136.66	0.32									
0089	WOMACK AMC-FT. BRAGG	101	2.016.850	19.878.60	0.62									
0117	59th MED WING-LACKLAND	98	1,973,914	20,183.86	0.67									
0052	TRIPLER AMC-FT SHAFTER	95	2,264,680	23,773.88	1.30	↓		There	are	nasica	$\Pi_{V}$			

30.343.28

2.45

114

3.454.380

There are basically two values in play for each metric that require analysis. In this case, they are Available FTEs and Pharmacy Weighted Procedures

# Medical Expense and Performance Reporting System (MEPRS)

# Questions?

**TMA MEPRS Program Office** 



